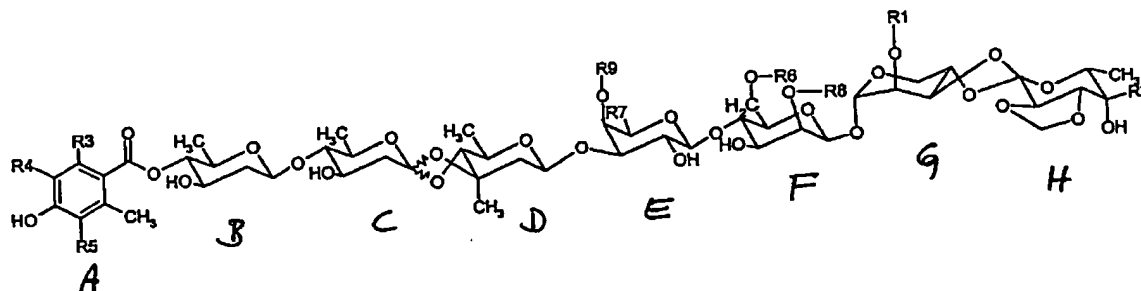


Amendments to the claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (original) Avilamycin derivative according to the general Formula I, also in the form of its diastereomers or enantiomers, i.e. racemic mixtures or other mixtures or pure diastereomers and/or enantiomers,



where independently of one another, with the following exception,

R1 is selected from H, COCH₃, COC₄H₉, COCH(CH₃)₂ or COCH₂CH₃,

R2 is selected from H, CHO, COCH₃ or CH(OH)CH₃,

R3 corresponds to OCH₃,

R4 corresponds to Cl,

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R5 corresponds to Cl,

R6 corresponds to CH₃,

R7 corresponds to H, CH₃ or CH₂OH,

R8 corresponds to CH₃,

and

R9 corresponds to CH₃,

where the following applies with reference to at least one of the radicals R3-R6, R8 or R9 in Formula I, in deviation from the above definition:

R3 is to be replaced by OH,

R4 is to be replaced by H,

R5 is to be replaced by H,

R6 is to be replaced by H,

R8 is to be replaced by H,

and/or

R9 is to be replaced by H,

with the proviso that R1-R9 cannot simultaneously take on the meanings in accordance with the combination, in each instance, in one of the compounds 1-4:

No.	R1	R2	R3	R4	R5	R6	R7	R8	R9
1	COCH(CH ₃) ₂	COCH ₃	OH	H	Cl	CH ₃	CH ₃	CH ₃	CH ₃
2	COCH(CH ₃) ₂	COCH ₃	OCH ₃	Cl	H	CH ₃	CH ₃	CH ₃	CH ₃
3	COCH(CH ₃) ₂	COCH ₃	OCH ₃	Cl	Cl	H	CH ₃	CH ₃	CH ₃
4	COCH(CH ₃) ₂	COCH ₃	OCH ₃	Cl	Cl	CH ₃	CH ₃	H	CH ₃

2-31. (canceled)

32. (new) Avilamycin derivative according to Claim 1, wherein at least R3 is to be replaced by OH, with the proviso that R1-R9 cannot simultaneously take on the meanings in accordance with the combination in the compound 1:

No.	R1	R2	R3	R4	R5	R6	R7	R8	R9
1	COCH(CH ₃) ₂	COCH ₃	OH	H	Cl	CH ₃	CH ₃	CH ₃	CH ₃

33. (new) Avilamycin derivative according to claim 1, wherein at least R4 and R5 in Formula I are to be replaced by H.

34. (new) Avilamycin derivative according to claim 1, wherein at least R6, R8 and/or R9 is/are to be replaced by H, with the proviso that R1-R9 cannot simultaneously take on the meanings in accordance with the combination in the compound 3 or cannot simultaneously take on the meanings in accordance with the combination in the compound 4:

No.	R1	R2	R3	R4	R5	R6	R7	R8	R9
3	COCH(CH ₃) ₂	COCH ₃	OCH ₃	Cl	Cl	H	CH ₃	CH ₃	CH ₃
4	COCH(CH ₃) ₂	COCH ₃	OCH ₃	Cl	Cl	CH ₃	CH ₃	H	CH ₃

35. (new) Avilamycin derivative according to claim 1, wherein at least R3 is to be replaced by OH, for one thing, and at least R4 and R5 are to be replaced by H, for another thing, or at least R6, R8 and/or R9 is/are to be replaced by H.
36. (previously presented) Avilamycin derivative according to the general Formula I, also in the form of its diastereomers or enantiomers, i.e. racemic mixtures or other mixtures or pure diastereomers and/or enantiomers, that is selected from among compounds in which R1-R9 are combined as follows:

R1	R2	R3	R4	R5	R6	R7	R8	R9
COCH(CH ₃) ₂	COCH ₃	OH	Cl	Cl	CH ₃	CH ₃	CH ₃	CH ₃
COCH ₂ CH ₃	H	OH	Cl	Cl	CH ₃	CH ₃	CH ₃	CH ₃
COCH ₃	COCH ₃	OH	Cl	Cl	CH ₃	CH ₃	CH ₃	CH ₃
COCH(CH ₃) ₂	CH(OH)CH ₃	OH	Cl	Cl	CH ₃	CH ₃	CH ₃	CH ₃
H	COCH ₃	OH	Cl	Cl	CH ₃	CH ₃	CH ₃	CH ₃
COCH ₃	CH(OH)CH ₃	OH	Cl	Cl	CH ₃	CH ₃	CH ₃	CH ₃
H	CH(OH)CH ₃	OH	Cl	Cl	CH ₃	CH ₃	CH ₃	CH ₃
COC ₄ H ₉	COCH ₃	OH	Cl	Cl	CH ₃	CH ₃	CH ₃	CH ₃
COCH(CH ₃) ₂	COCH ₃	OH	Cl	H	CH ₃	CH ₃	CH ₃	CH ₃
COCH ₂ CH ₃	COCH ₃	OH	Cl	Cl	CH ₃	CH ₃	CH ₃	CH ₃
COCH(CH ₃) ₂	COCH ₃	OH	Cl	Cl	H	CH ₃	CH ₃	CH ₃

COCH(CH ₃) ₂	COCH ₃	OH	Cl	Cl	CH ₃	CH ₂ OH	CH ₃	CH ₃
COCH(CH ₃) ₂	CHO	OH	Cl	Cl	CH ₃	CH ₃	CH ₃	CH ₃
COCH(CH ₃) ₂	COCH ₃	OH	Cl	Cl	CH ₃	H	CH ₃	CH ₃
COCH(CH ₃) ₂	COCH ₃	OH	Cl	Cl	CH ₃	CH ₃	H	CH ₃
COCH(CH ₃) ₂	COCH ₃	OH	H	H	CH ₃	CH ₃	CH ₃	CH ₃
COCH ₂ CH ₃	H	OH	H	H	CH ₃	CH ₃	CH ₃	CH ₃
COCH ₃	COCH ₃	OH	H	H	CH ₃	CH ₃	CH ₃	CH ₃
COCH(CH ₃) ₂	CH(OH)CH ₃	OH	H	H	CH ₃	CH ₃	CH ₃	CH ₃
H	COCH ₃	OH	H	H	CH ₃	CH ₃	CH ₃	CH ₃
COCH ₃	CH(OH)CH ₃	OH	H	H	CH ₃	CH ₃	CH ₃	CH ₃
H	CH(OH)CH ₃	OH	H	H	CH ₃	CH ₃	CH ₃	CH ₃
COCH(CH ₃) ₂	COCH ₃	OH	H	H	CH ₃	CH ₃	CH ₃	CH ₃
COC ₄ H ₉	COCH ₃	OH	H	H	CH ₃	CH ₃	CH ₃	CH ₃
COCH(CH ₃) ₂	COCH ₃	OH	H	H	CH ₃	CH ₃	CH ₃	CH ₃
COCH ₂ CH ₃	COCH ₃	OH	H	H	CH ₃	CH ₃	CH ₃	CH ₃
COCH(CH ₃) ₂	COCH ₃	OH	H	H	H	CH ₃	CH ₃	CH ₃
COCH(CH ₃) ₂	COCH ₃	OH	H	H	CH ₃	CH ₂ OH	CH ₃	CH ₃
COCH(CH ₃) ₂	CHO	OH	H	H	CH ₃	CH ₃	CH ₃	CH ₃
COCH(CH ₃) ₂	COCH ₃	OH	H	H	CH ₃	H	CH ₃	CH ₃
COCH(CH ₃) ₂	COCH ₃	OH	H	H	CH ₃	CH ₃	H	CH ₃
COCH(CH ₃) ₂	COCH ₃	OH	Cl	Cl	H	CH ₃	CH ₃	CH ₃
COCH ₂ CH ₃	H	OH	Cl	Cl	H	CH ₃	CH ₃	CH ₃
COCH ₃	COCH ₃	OH	Cl	Cl	H	CH ₃	CH ₃	CH ₃
COCH(CH ₃) ₂	CH(OH)CH ₃	OH	Cl	Cl	H	CH ₃	CH ₃	CH ₃

H	COCH ₃	OH	Cl	Cl	H	CH ₃	CH ₃	CH ₃
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preferably

R1	R2	R3	R4	R5	R6	R7	R8	R9
COCH(CH ₃) ₂	COCH ₃	OH	Cl	Cl	CH ₃	CH ₃	CH ₃	CH ₃
COCH(CH ₃) ₂	CH(OH)CH ₃	OH	Cl	Cl	CH ₃	CH ₃	CH ₃	CH ₃
COCH(CH ₃) ₂	COCH ₃	OH	H	H	CH ₃	CH ₃	CH ₃	CH ₃
COCH(CH ₃) ₂	CH(OH)CH ₃	OH	H	H	CH ₃	CH ₃	CH ₃	CH ₃
COCH(CH ₃) ₂	COCH ₃	OH	Cl	Cl	H	CH ₃	CH ₃	CH ₃
COCH(CH ₃) ₂	CH(OH)CH ₃	OH	Cl	Cl	H	CH ₃	CH ₃	CH ₃
COCH(CH ₃) ₂	COCH ₃	OH	Cl	Cl	CH ₃	CH ₃	H	CH ₃
COCH(CH ₃) ₂	CH(OH)CH ₃	OH	Cl	Cl	CH ₃	CH ₃	H	CH ₃
COCH(CH ₃) ₂	COCH ₃	OH	Cl	Cl	CH ₃	CH ₃	CH ₃	H
COCH(CH ₃) ₂	CH(OH)CH ₃	OH	Cl	Cl	CH ₃	CH ₃	CH ₃	H

37. (new) Avilamycin derivative that can be obtained in a cell that can be cultivated, wherein said cell demonstrates the necessary genes and/or enzymes for the synthesis of an orthosomycin basic body consisting of

- a) an end-position dichloroisoevernic acid radical (A in Formula I) and
- b) a heptasaccharide esterified with it, linked via normal ester bonds and ortho ester bonds (B to H in Formula I), composed of:

- (i) two D-olivose radicals (B and C),
- (ii) a 2-desoxy-D-evalose radical (D),
- (iii) a D-fucose radical (E),
- (iv) a D-mannose radical (F),
- (v) an L-lyxose radical (G), and

(vi) a (methyl) eurekanate radical (H),

by modifying with gene technology, deleting, and/or not expressing at least one nucleic acid, the sequence of which corresponds by at least 95%, preferably 97%, with particular precision, in accordance with Table 1 in combination with Figure 1, by cultivating the cell modified in this way, by recovering and processing the top portion of the culture, by purifying and isolating the avilamycin derivative(s), and, if applicable, by separating different derivatives from one another,

with the proviso that R1-R9 cannot simultaneously take on the meanings in accordance with the combination, in each instance, in one of the compounds 1-16:

No.	R1	R2	R3	R4	R5	R6	R7	R8	R9
1	COCH(CH ₃) ₂	COCH ₃	OH	H	Cl	CH ₃	CH ₃	CH ₃	CH ₃
2	COCH(CH ₃) ₂	COCH ₃	OCH ₃	Cl	H	CH ₃	CH ₃	CH ₃	CH ₃
3	COCH(CH ₃) ₂	COCH ₃	OCH ₃	Cl	Cl	H	CH ₃	CH ₃	CH ₃
4	COCH(CH ₃) ₂	COCH ₃	OCH ₃	Cl	Cl	CH ₃	CH ₃	H	CH ₃
5	COCH(CH ₃) ₂	CHO	OCH ₃	Cl	Cl	CH ₃	CH ₃	CH ₃	CH ₃
6	COCH(CH ₃) ₂	COCH ₃	OCH ₃	Cl	Cl	CH ₃	H	CH ₃	CH ₃
7	COCH(CH ₃) ₂	COCH ₃	OCH ₃	Cl	Cl	CH ₃	CH ₃	CH ₃	CH ₃
8	COCH ₂ CH ₃	H	OCH ₃	Cl	Cl	CH ₃	CH ₃	CH ₃	CH ₃
9	COCH ₃	COCH ₃	OCH ₃	Cl	Cl	CH ₃	CH ₃	CH ₃	CH ₃
10	COCH(CH ₃) ₂	CH(OH)CH ₃	OCH ₃	Cl	Cl	CH ₃	CH ₃	CH ₃	CH ₃
11	H	COCH ₃	OCH ₃	Cl	Cl	CH ₃	CH ₃	CH ₃	CH ₃
12	COCH ₃	CH(OH)CH ₃	OCH ₃	Cl	Cl	CH ₃	CH ₃	CH ₃	CH ₃
13	H	CH(OH)CH ₃	OCH ₃	Cl	Cl	CH ₃	CH ₃	CH ₃	CH ₃
14	COC ₄ H ₉	COCH ₃	OCH ₃	Cl	Cl	CH ₃	CH ₃	CH ₃	CH ₃

15	COCH ₂ CH ₃	COCH ₃	OCH ₃	CI	CI	CH ₃	CH ₃	CH ₃	CH ₃
16	COCH(CH ₃) ₂	COCH ₃	OCH ₃	CI	CI	CH ₃	CH ₂ OH	CH ₃	CH ₃

38. (new) Avilamycin derivative according to Claim 37, wherein the cell that can be cultivated is selected from a cell of the type *Streptomyces viridochromogenes* or a cell that with the exception of the nucleic acid(s) modified by gene technology, deleted, or not expressed, contains the nucleic acids in accordance with a sequence of one of the consecutive numbers 1-54 (in accordance with Table 1 in combination with Fig. 1), i.e. nucleic acids that are homologous to it by at least 95%, preferably 97%, or contains the gene cluster in accordance Fig. 109, is preferably selected from a cell of the type *Streptomyces viridochromogenes*, particularly a cell of the type *Streptomyces viridochromogenes* Tü 57.
39. (new) Avilamycin derivative according to claim 37, wherein the modified nucleic acid(s) coded for a methyl transferase and/or for a halogenase.
40. (previously presented) Avilamycin derivative according to Claim 39, characterized in that the sequence(s) of the modified nucleic acid(s) before being modified correspond(s) by at least 95%, preferably 97%, with particular precision, to the nucleic acid sequence(s) of at least one of the sequences in accordance with consecutive number 1 or 2-7 (in accordance with Table 1 in combination with Fig. 1), preferably one of the sequences with consecutive number 1, 2, 4, or 6 (Table 1 in combination with Fig. 1), particularly the sequence with consecutive number 2 or the sequences with consecutive numbers 2 and 1, numbers 2 and 4, or numbers 2 and 6 (in accordance with Table 1 in combination with Fig. 1)
41. (new) Avilamycin derivative according to claim 37, wherein the modification of the nucleic acid(s) has the result that the protein(s) or polypeptide(s) coded by the nucleic acid(s) modified by gene technology is/are no longer synthesized after the modification by gene technology.

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42. (new)) Avilamycin derivative according to claim 1 , wherein it is more hydrophilic than avilamycin A or C or evernimycin (ziracin).

43. (new) Medication containing avilamycin derivatives according to claim 1 , as well as any suitable additives and/or ancillary substances, if necessary.